

REMARKS

Applicants wish to thank Examiner Gilbert for the courtesies extended to applicants' representative during the in-person interview on March 24, 2009, during which time the Examiner and applicants' representative discussed the features of the claims in light of the outstanding Office action and the applied references. Applicants have amended independent claims 8, 14, 46, 67, and 71 in the manner discussed with the Examiner, and have added new claims 76-83 as discussed with the Examiner. Accordingly, applicants respectfully request withdrawal of the rejections and submit that all claims are in condition for allowance.

Claims 8-15, 17-18, 38-39, 41-49, 51-53, 55-58, 67, and 71-83 are pending, with claims 8, 14, 46, 51, 53, 67, 71, 76, and 81 being independent. Claims 42-43, 51, and 53 have been withdrawn by the Examiner. Claims 8, 14, 46, 67 and 71 have been amended and new claims 76-83 have been added. Support for the amendments and new claims may be found, for example, in the specification as filed at page 3, lines 20-21, page 11, line 29 to page 12, line 5, page 13, lines 2-26, page 14, lines 9-16, and page 17, lines 18-30. No new matter is presented by the amendments or the new claims. Applicants respectfully submit that all pending claims are in condition for allowance for at least the following reasons.

Claim Rejections Under 35 U.S.C. § 112

Claim 14 was rejected under 35 U.S.C. 112, second paragraph, as allegedly failing to provide antecedent basis for "pressure data." Without conceding the propriety of the Examiner's rejection, applicants have amended claim 14 by removing the phrase "pressure data," thereby rendering this rejection moot. For at least these reasons, Applicants respectfully request favorable reconsideration and withdrawal of the rejections under 35 U.S.C. § 112.

Claim Rejections Under 35 U.S.C. 103

The Examiner has rejected claims 8-13, 41, 44-45, 67, and 71 as obvious over U.S. Patent No. 6,370,420 to Kraft ("Kraft") in view of U.S. Patent No. 4,551,133 to Zegers de Beyl et al. ("Zegers"). Claims 8, 67, and 71 are independent.

Independent claims 8, 67, and 71, as amended, recite an operator configured to actuate the introducer to introduce fluid into the spine of the patient at a constant flow rate that is not controlled by feedback based on a fluid introduction parameter and configured to determine impedance data indicative of the flow rate-dependent impedance based upon pressure and volume of fluid dispenses during an actuation of the introducer prior to insertion of the introducer into the spine. As discussed with the Examiner during the interview, the combination of Kraft and Zegers fails to disclose or suggest the operator as claimed. Accordingly, applicants submit that claims 8-13, 41, 44-45, 67, and 71 are allowable over Kraft in view of Zegers.

The Examiner has rejected claims 72, and 74-75, which depend from claim 71, as being obvious over Kraft in view of Zegers in further view of U.S. Patent No. 5,808,203 to Nolan ("Nolan"). As discussion with the Examiner, Nolan does not overcome the deficiencies in Kraft and Zegers discussed above with respect to independent claim 71, and for at least these reasons, dependent claims 72 and 74-75 are patentable over Kraft in view of Zegers in further view of Nolan.

The Examiner has rejected claims 14-15, 17-18, and 55-58 as obvious over U.S. Patent No. 6,945,954 to Hochman et al. ("Hochman") in view of U.S. Patent No. 3,623,474 to Heilman ("Heilman"). Claim 14 is independent.

Independent claim 14, as amended, recites an operator configured to actuate the introducer, the operator including code to introduce the fluid into the spine at a constant flow rate that is not controlled by feedback based on a fluid introduction parameter. As discussed with the Examiner during the interview, the combination of Hochman and Heilman fails to disclose or suggest the operator as claimed. Accordingly, claim 14, and its dependent claims 15, 17-18, and 55-58 are allowable over Hochman.

The Examiner has rejected claim 38, which depends from claim 8, as being obvious over Kraft in view Zegers and in further view of U.S. Patent No. 6,258,042 to Factor et al. ("Factor"). As discussed with the Examiner, Factor does not overcome the deficiencies in Kraft and Zegers discussed above with respect to claim 8, and for at least these reasons, claim 38 is patentable over Kraft in view of Zegers and in further view of Factor.

The Examiner has rejected claims 38-40, 46-50, 52-54, 62-66, and 68-70 as being obvious over Kraft in view of Zegers and in further view of U.S. Patent No. 5,692,500 to Gaston-

Johansson ("Gaston-Johansson").¹ Gaston-Johansson does not overcome the deficiencies in Kraft and Zegers discussed above, and therefore, for at least these reasons, pending claims 38-39, 46-49, and 52-53 are patentable over Kraft in view of Gaston-Johansson.

The Examiner has rejected claims 38-40, 46-50, 52-54, 62-66, and 68-70 as being obvious over Kraft in view of Zegers and in further view of U.S. Patent No. 6,856,315 to Eberlein ("Eberlein").² Eberlein likewise does not overcome the deficiencies in Kraft and Zegers discussed above, and therefore, for at least these reasons, pending claims 38-39, 46-49, and 52-53 are patentable over Kraft in view of Eberlein.

New claim 76 is similar to previously-allowable claim 73, and new claim 81 recites a pressure transducer disposed between at least a portion of the cap and at least a portion of the receivable portion of the plunger such that the pressure transducer is in direct fluid contact with fluid in the syringe. As discussed with the Examiner, none of the asserted references discloses or suggests such features.

Applicants do not acquiesce in the Examiner's characterizations of the art. For brevity and to advance prosecution, applicants may not have addressed all characterizations of the art and reserve the right to do so in further prosecution of this or a subsequent application. The absence of an explicit response by applicants to any of the Examiner's positions does not constitute a concession of the Examiner's positions. The fact that applicants' comments have focused on particular arguments does not constitute a concession that there are not other arguments for patentability of the claims. Applicants submit that all of the dependent claims are patentable for at least the reasons given with respect to the claims on which they depend.

¹ Claims 40, 50, 54, 62-66, and 68-70 have been canceled, without prejudice, thereby rendering this rejection moot as to these claims.

² Claims 40, 50, 54, 62-66, and 68-70 have been canceled, without prejudice, thereby rendering this rejection moot as to these claims.


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Page : 15 of 15

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Respectfully submitted,

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